



INSTALLATION INSTRUCTIONS

Unitronic K04 Upgrade for B8/B8.5 A4®/A5® & Q5 2.0 TSI® AVS
UH003-BTA

Unitronic recommends that you read through the entire installation instructions prior to beginning the installation to familiarize yourself with the included components, tools required, and procedures involved with the installation.

DISCLAIMER: Unitronic recommends that a Unitronic Authorized Dealer or other qualified and trained professional should perform the installation of this product.

Unitronic Installation Instructions are also available in digital format, if you prefer. Please visit the corresponding product page for a link to download the digital Installation Instructions. www.getunitronic.com

It is recommended to confirm all parts are present prior to beginning the installation.

PACKING LIST:

PART NUMBER	DESCRIPTION	QUANTITY INCLUDED
UH001-IN0	Diverter Valve Adapter	1
UH003-BT0	K04 Hardware Kit	1
UH017-IC1	Silicone Hose Kit	1
UH003-BT3	K04 Turbocharger	1
UH005-AC0	PCV Adapter	1

RECOMMENDED TOOLS NEEDED:

- Jack Stands or Engine Hoise
- Flat Head Screwdriver
- 16mm Socket
- 13mm Socket
- 12mm Socket
- Ratchet
- 8mm Triple Square
- 10mm Allen Key
- 5mm Allen Key
- Hose Clamp Removal Tool
- Coolant Drain Pan
- Engine Oil Drain Pan

NOTE:

Exhaust Manifold Nut Tightening Procedure: Tighten the first, third, fifth, second, and fourth (in that order) nuts in order from the front of the engine to rear to 5 Nm. Repeat same order tightening to 12 Nm. Repeat again to 16 Nm. Finally, apply final torque of 25 Nm in same order.



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- 1** Raise the vehicle on jack stands or vehicle hoist to gain access to the underside of the vehicle.
- 2** Remove the belly pan from the underside of the vehicle using a flat head screwdriver.
- 3** Remove the engine cover by firmly pulling upwards to release the ball joint connections/retaining grommets.
- 4** Disconnect the mass air flow (MAF) sensor electrical connection. Firmly depress the retaining tab while pressing inwards on the sensor connector and immediately pull sensor connector outward to remove.
- 5** Loosen hose clamp connecting turbo inlet hose to MAF housing and compressor inlet using your flat head screwdriver. Remove the inlet hose and set aside.
- 6** Remove the air box by disconnecting the air inlet duct from the airbox and then pulling firmly upwards on the airbox to release it from its mounting grommets.
- 7** Proceed by draining the engine coolant by releasing the drain plug at the radiator from the underside of the vehicle.
- 8** While under the vehicle, it's recommend to also drain the engine oil in preparation of removing the turbocharger's oil lines.
- 9** With the engine coolant and oil now drained, remove the exhaust manifold heat shield. Using your 13mm socket and ratchet remove the three 13mm nuts.
- 10** Next, remove the 5mm allen bolts on the PCV ventilation line connected to the turbocharger's compressor inlet using your allen key.
- 11** Remove the hose connected to the compressor housing nipple.
- 12** Remove the 5mm allen bolts holding the oil feed line to the turbocharger assembly and set the bolts aside. Additionally, remove the 8mm triple square bolt holding the oil feed line to the engine block.



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- 13** Remove the bolt holding the coolant supply line banjo using a 10mm allen to the turbocharger center section and move it to the side to prepare for turbocharger assembly removal. Disconnect the 10mm coolant return line banjo bolt, as well.
- 14** Loosen the hose clamp using your flat head screwdriver connecting the charge hose from the intercooler to the compressor outlet. Disconnect the hose clamp on the other end of the boost hose, remove boost hose.
- 15** Using a 5mm allen, Disconnect the Diverter Valve (DV) including it's electrical connections in preparation for turbocharger assembly removal. Remember that once the turbocharger assembly is removed, you will have to remove the DV and transfer it over into the supplied Diverter Valve Adapter (UH001-IN0)
- 16** Remove two 8mm triple square bolts on the oil drain line connecting the drain flange to the block. The oil drain line will come out with the turbocharger assembly.
- 17** Next, we will remove the downpipe in preparation for turbocharger assembly removal starting with loosening the four 16mm nuts to disconnect the upper downpipe flange from the turbine housing.
- 18** Disconnect the downpipe/catalytic converter mounting bracket bolt using a 13mm socket.
- 19** Disconnect the OEM sleeve clamp holding the downpipe to the cat-back using a 13mm socket.
- 20** With a 12mm socket, loosen and remove the bolts on the turbocharger support bracket.
- 21** Remove the turbocharger/exhaust manifold nuts holding the turbocharger assembly to the cylinder head.
- 22** Remove turbocharger assembly and set aside.
- 23** Locate Unitronic K04 Turbocharger (UH003-BT3) and transfer over oil and coolant feed and drain lines from stock turbo to K04 turbo. Locate Unitronic K04 Hardware Kit (UH003-BT0) and install downpipe flange studs into turbine discharge flange. Prepare other o-rings and seals for turbocharger installation.
- 24** Locate Unitronic PCV Adapter and install PCV Adapter in preparation for PCV connection once turbocharger is installed. It is suggested to reinstall the coolant feed line on the engine block first before reinstalling the turbo charger and connecting the banjo bolt onto the turbocharger.



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- 25** Install Unitronic K04 Turbocharger in the same procedure/order as removal. Be sure to follow correct tightening/torque specifications for all exhaust manifold nuts, banjo bolts, and other turbocharger accessories. Connect all oil and coolant lines to the engine block and associated coolant fittings, etc. Reference Torque specification chart in the preface of this document.
- 26** Install Unitronic 3" Downpipe Upper Section (sold separately) onto turbocharger turbine housing discharge flange using a 16mm socket. Tighten downpipe flange nuts to 40 Nm. Install Unitronic Mid-Pipe and Exhaust Reducer (sold with Unitronic Downpipe assembly) and affix using supplied v-band clamps.
- 27** Next, locate Unitronic Silicone Hose Kit (UH017-IC1) and install compressor outlet hose and affix using supplied hose clamps.
- 28** Install Turbo Inlet Hose and connect DV Adapter / re-route assembly.
- 29** Re-connect the Diverter Valve electrical connections.
- 30** Re-connect PCV line to compressor inlet and tighten to 9 Nm.
- 31** Re-install air box and intake air ducting to front radiator support.
- 32** Re-install belly pan onto the underside of the vehicle.
- 33** Lower vehicle onto ground from vehicle hoist or jack stands.
- 34** Replace oil filter/add engine oil/add engine coolant.
- 35** Re-install engine cover by lining up mounting grommets with ball joints and firmly depress engine cover onto ball joints.

CONGRATULATIONS. You've successfully installed Unitronic's K04 Upgrade Kit! Go enjoy!